

SPORTident BS8 stations

July 2015



Release notes



Dear customer,

Thank you for using our SPORTident BS8 Control station. This letter describes features to be considered using the system parts.

Product features

The SPORTident-Station BS8 is based on a newly developed hardware core. The new design offers a number of significant improvements and new features compared with the older series of SPORTident-Stations. The new BS8 station is still compatible with the already existing SPORTident- System parts and can be used mixed with older equipment.

- The new BS8 station is designed as a smooth and compact device. It is about the size of a mobile phone but still large enough to incorporate a number of future enhancements. Different mounting options allow the station to be used for a variety of applications in different environments. A special semi-transparent plastic is used to show off the insides. The BS8 station is available in two different colors. A special conversion holder is also available so that the station can be seated in an existing larger holder that is used for BS8 stations.
- The BS8 station is “always on” and works in a low power **Stand-by Mode**. There is no need to switch on the station or to make any special preparations before the unit can be used. Also in Stand-by Mode the station is fully qualified to proceed SPORTident-Cards. The maximal wake up time is 1 second but can be adjusted by the user. A faster wake up will increase station’s power consumption. The station is switched from Stand-by Mode to Active Mode when the first SPORTident-Card is inserted.
- Once the station is in **Active Mode** the reaction time to the insertion of subsequent SI-Cards is very quick. After an adjustable period without a SI-Card being inserted, the station drops back to Stand-by Mode.
- The BS8 station features with an on-board service display visible from the back side (BS8-DB) or from the top side (BS8-DT). The display shows quickly main stations’ settings like real time and code number. After a card has punched the card number is displayed for 3 seconds.
- From Stand-by Mode the station can also be switched to **Service Mode**. This is done by switching on the station with the Service/OFF-Card. In Service Mode the station’s LCD display offers additional information like the serial number, battery consumption and firmware version. Information about station’s battery is given both by measuring the battery voltage and by computing the station’s battery consumption in relation to the battery performance. Service Mode is automatically terminated after 10 minutes or earlier if the Service/OFF-Card is used.



- It was a special goal to develop a device which best meets the growing requirement to protect our environment. The SPORTident station BS8 features with a very low power consumption. In typical application cycles a battery will serve for several years. This enables the use of a smaller battery. The battery is soldered to the printed circuit board and this enables the SPORTident GmbH to guarantee and control a fully certified disposal of empty batteries. For the first time an non-polluting lithium battery is used. This battery type does neither contain Cadmium nor Mercury. Other points of importance are decreased use of plastic material as a result of the smaller volume and weight.
- The station's real time clock system is calibrated and temperature compensated (starting with firmware V5.53). This offers higher accuracy also at very high and very low temperatures. The internal time resolution is 1/256 s, approximately 4 ms.
- The station's backup memory is increased and is typically 8 times bigger than that of the BS8 station.

Handling and service

- The BS8 station only needs minimal services. In typical application cycles only station's real time has to be monitored.
- The station's settings can be changed by using PC-software **SI-Config**. In the inductive coupling process between a SPORTident-Master Station and a slaved station a coupling stick can be used to improve data transmission.
- To achieve highest synchronism in the station's real time clock it is recommended to adjust station's real time by using the "SI-Master" (coupling stick needed).
- The battery has a capacity of 1000 mAh. This value should not be changed in the setups.
- SPORTident-Station BS7 and 8 feature with an easy firmware upgrade mechanism. Station's firmware can be uploaded by the user via simple inductive coupling. This feature keeps the station up to date and enables the implementation of additional functionality. To upgrade the firmware a master station BSM7 must be used. Information about the firmware version and features are available at www.sportident.com.

Specifications

● Internal power supply:	1 x Lithium ½ AA cell, no rechargeable
● Battery capacity:	1000 mAh
● Battery life:	3 – 5 years
● Battery exchange:	by SPORTident GmbH and authorized SPORTident dealers
● Operating range:	-20°C - +50°C
● International protection class:	IP 64 (DIN EN 60529) – Protection against penetration of dust – Protection against splashed water from all directions
● Dimensions:	101mm x 51mm x 19mm
● Weight:	62 g
● Accuracy at normal temperature:	less than +/- 20 seconds a month
● Switch on time:	< 1 second (standard)
● Backup memory:	maximum number of punches: 21802 maximum number of SI-Cards data records: 1022

Good luck with SPORTident!

Notes:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the

interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.